

Characteristics of Crosslinking Polymers Play Major Roles in Improving the Stability and Catalytic Properties of Immobilized *Thermomyces lanuginosus* Lipase

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Table S1. Significance analysis for responses yield, activity and specific activity.

		Significance (P values)			
		Yield	Activity		Specific activity
Model		< 0.0001		< 0.0001	< 0.0001
	A	< 0.0001	A	0.0055	E
	B	< 0.0001	B	< 0.0001	DE
	E	< 0.0001	C	0.0008	
	AB	0.0023	E	< 0.0001	
	AD	0.0006	AE	0.0068	
Lack of Fit		0.5743		0.9258	0.9281

Note: factor A-lipase concentration (mg/mL); factor B-ethanol fraction (% v/v); factor C-NaCl addition (mol/L); factor D-temperature (°C); factor E-pH.

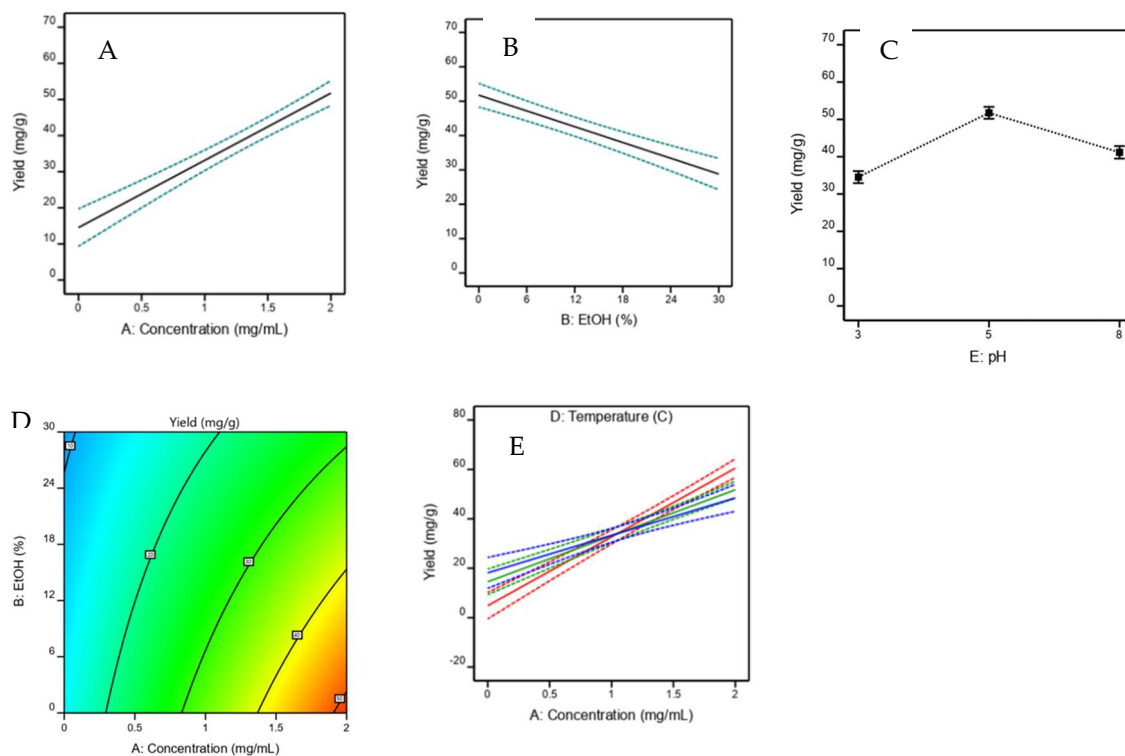


Figure S1. The influence of significant factors on the immobilization yield. (A) concentration; (B) ethanol fraction; (C) pH values; (D) interaction between ethanol fraction and concentration; (E) interaction between temperature and concentration.

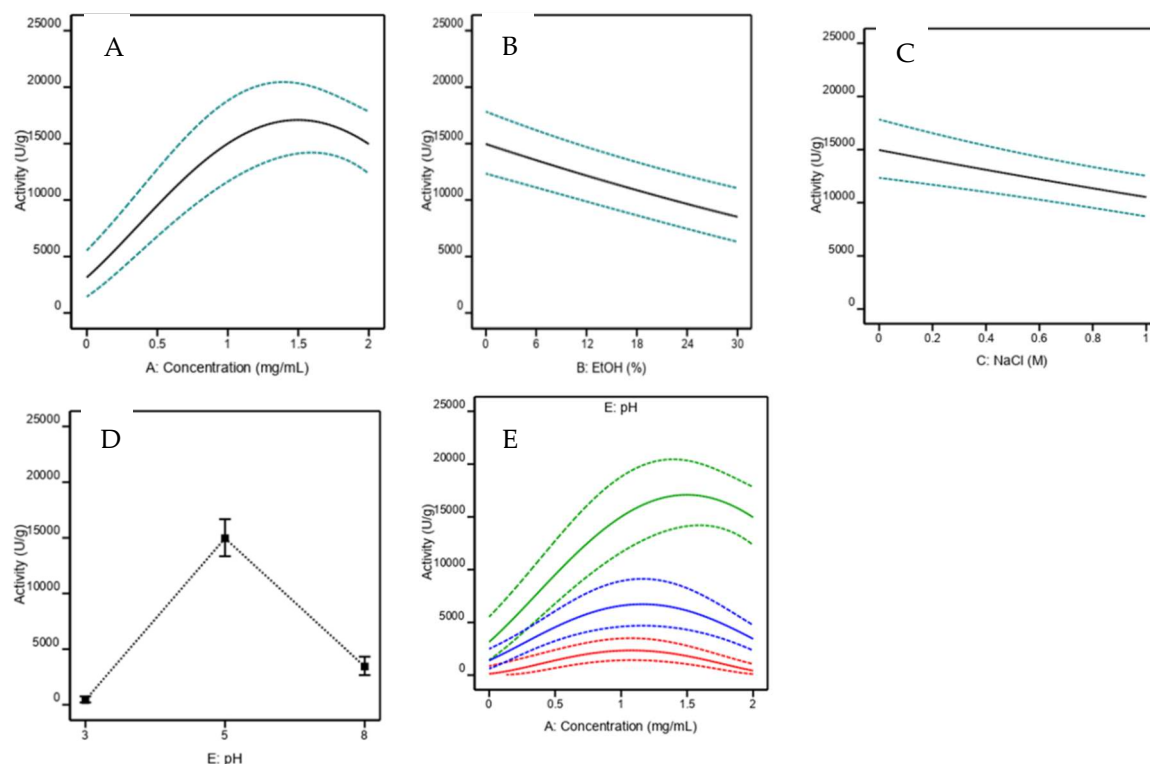


Figure S2. The influence of significant factors on the activity. (A) concentration; (B) ethanol fraction; (C) NaCl concentration; (D) pH values; (E) interaction between pH values and concentration.

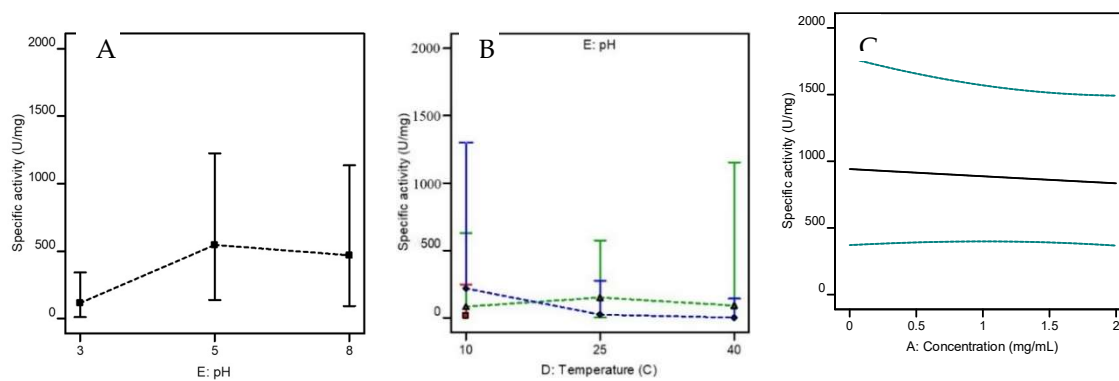


Figure S3. The influence of significant factors on the specific activity. (A) pH values; (B) interaction between pH and temperature; (C) concentration (insignificant).

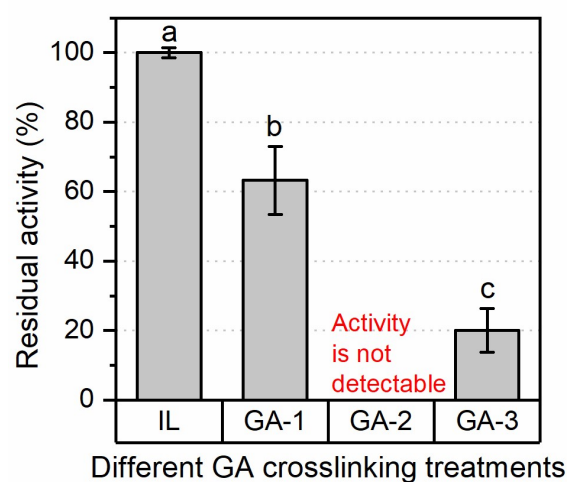


Figure S4. Influence of different glutaraldehyde (GA) treatments on the residual activity. IL: immobilized lipase via adsorption; GA-1: IL crosslinked via 1% GA for 15 min; GA-2: IL crosslinked via 10% GA for 15 min; GA-3: IL crosslinked via 1% GA for 1 h.

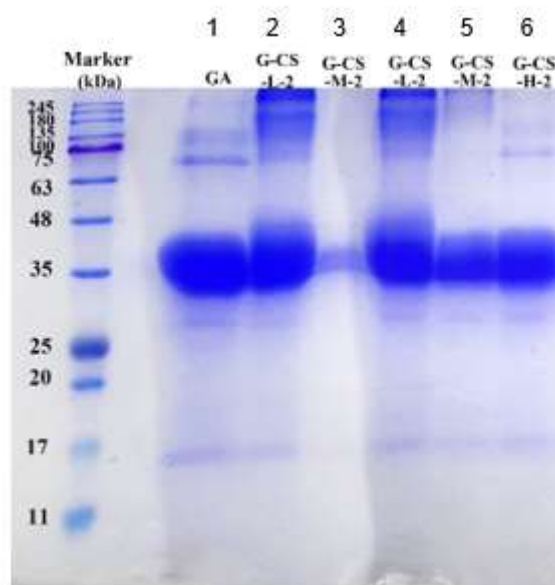


Figure S5. Original SDS-PAGE pattern of various modified immobilized lipase preparations. Lane 3 was due to an experimental mistake.